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apparatus of a packet, and decides that rescue has become impossible when said drop transmitting apparatus resides in the signal non-arrival range.

10. (currently amended) ~~The apparatus according to claim 1A~~ transmitting apparatus in a ring network in which a plurality of transmitting apparatuses are connected in ring form so as to be capable of transmitting in each of upstream and downstream directions, working and protection channels are assigned to each direction and, when failure occurs in a transmission path, a transmit signal is looped back using the protection channel to effect rescue, said apparatus comprising:

rescue-impossible detection means for detecting that communication between an insert transmitting apparatus that incorporates a packet, which enters from a lower-order side, into a higher-order signal and transmits the signal to a transmission path, and a drop transmitting apparatus that extracts the packet from the higher-order signal and transmits the packet to another lower-order side, cannot be rescued because of transmission-path failure; and
packet-transmission halting means for halting transmission of the packet to the transmission path when communication has become unrescuable, wherein when communication cannot be performed because of multiple transmission-path failures in a multipoint-to-point insert connection that transmits packets from a plurality of insert transmitting apparatuses to one drop transmitting apparatus using the same connection ID, a packet-transmission halting means of each insert transmitting apparatus halts transmission of the packet to the transmission path.

11. (currently amended) ~~The apparatus according to claim 1A~~ transmitting apparatus in a ring network in which a plurality of transmitting apparatuses are connected in ring form so as

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to be capable of transmitting in each of upstream and downstream directions, working and protection channels are assigned to each direction and, when failure occurs in a transmission path, a transmit signal is looped back using the protection channel to effect rescue, said apparatus comprising:

rescue-impossible detection means for detecting that communication between an insert transmitting apparatus that incorporates a packet, which enters from a lower-order side, into a higher-order signal and transmits the signal to a transmission path, and a drop transmitting apparatus that extracts the packet from the higher-order signal and transmits the packet to another lower-order side, cannot be rescued because of transmission-path failure; and
packet-transmission halting means for halting transmission of the packet to the transmission path when communication has become unrescuable, wherein in a case where the same connection ID is not used in different spans of a network in a multipoint-to-point insert connection that transmits packets from a plurality of insert transmitting apparatuses to one drop transmitting apparatus using the same connection ID, said rescue-impossible detection means of each insert transmitting apparatus decides that rescue has become impossible when the drop transmitting apparatus resides in the signal non-arrival range.

12. (original) The apparatus according to claim 5, wherein in a case where the same connection ID is not used in different spans of a network in a multipoint-to-point insert connection that transmits packets from a plurality of insert transmitting apparatuses to one drop transmitting apparatus using the same connection ID, the ID of the drop transmitting apparatus is retained in said table of each insert transmitting apparatus; and

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when failures occur at multiple locations, said rescue-impossible detection of each insert transmitting apparatus obtains a multipoint-to-point drop transmitting apparatus and decides that rescue has become impossible when this drop transmitting apparatus resides in the signal non-arrival range.

13. (original) The apparatus according to claim 6, further comprising failure reporting means, wherein a multipoint-to-point insert connection and point-to-multipoint drop connection are managed as a pair and, when a prescribed insert connection becomes unrescuable, said failure reporting means inserts a failure notification packet in the drop connection of the pair.

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